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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,999	02/02/2001	Paul Stiros	8412	7441
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THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL TECHNICAL CENTER - BOX 161 6110 CENTER HILL AVENUE CINCINNATI, OH 45224			CHORBAJI, MONZER R	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 08/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/775,999	Applicant(s) STIROS ET AL.	
	Examiner MONZER R CHORBAJI	Art Unit 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/12/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This non-final office action is in response to the RCE/Amendment received on 06/01/2004

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 12; applicant uses the term "said filter element". Is the applicant referring to the first filter member? If so, then the word "first" needs to be added.

Clarification is needed to understand the meaning of claim 1.

In claim 1, lines 16-17; applicant uses the feature "without said air moving member". Does the applicant mean that the second air filter member does not include an air-moving member? Rewording of this feature is needed in order to understand the meaning of claim 1.

Double Patenting

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

4. A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5. Claim 16 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 4 of copending Application No. 09/972,098. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

The concepts of claim 16 of application number 09/775,999 are included in claims 1 and 4 of copending application 09/972,098. Claims 1 and 4 of copending application 09/972,098 are not worded exactly as claim 16 of application number 09/775,999, but the claims are not patentably distinguishable from each other. For example, the claims teach a first emitting device including an air moving member and a first passive deodorizing and/or emitting member to be used in the air-moving member. The first passive deodorizing and/or emitting member include a first substance. Also, the claims recites one or more additional deodorizing and/or emitting members that include passive deodorizing and/or emitting members with a medium that can be different from the first medium and the passive deodorizing and/or emitting members can be used interchangeably with the first passive deodorizing and/or emitting member in the air moving member. Note that lines 12-13 of claim 1 suggest interchangeabilities.

6. Claim 16 is provisionally rejected under 35 U.S.C. 102(e) as being anticipated by copending Application No. 09/972,098 which has a common inventors with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e), if published under 35 U.S.C. 122(b) or patented. This provisional rejection under 35 U.S.C. 102(e) is based upon a presumption of future publication or patenting of the copending application.

The concepts of claim 16 of application number 09/775,999 are included in claims 1 and 4 of copending application 09/972,098. Claims 1 and 4 of copending application 09/972,098 are not worded exactly as claim 16 of application number 09/775,999, but the claims are not patentably distinguishable from each other. For example, the claims teach a first emitting device including an air moving member and a first passive deodorizing and/or emitting member to be used in the air-moving member. The first passive deodorizing and/or emitting member include a first substance. Also, the claims recites one or more additional deodorizing and/or emitting members that include passive deodorizing and/or emitting members with a medium that can be different from the first medium and the passive deodorizing and/or emitting members can be used interchangeably with the first passive deodorizing and/or emitting member in the air moving member.

This provisional rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131. This rejection may not be overcome by the filing of a terminal disclaimer. See *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991).

7. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

8. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

9. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/972,098 in view of Randolph (U.S.P.N. 4,844,394).

This is a provisional obviousness-type double patenting rejection.

The concepts of claim 1 of application number 09/775,999 are included in claim 1 of copending application 09/972,098. For example, the claim teaches a first emitting device including an air moving member and a first passive deodorizing and/or emitting member to be used in the air-moving member. The first passive deodorizing and/or emitting member include a first substance. Also, the claim recites one or more additional deodorizing and/or emitting members that include passive deodorizing and/or emitting members with a medium that can be different from the first medium and the passive deodorizing and/or emitting members can be used interchangeably with the first passive deodorizing and/or emitting member in the air moving member. However, claim 1 of copending Application No. 09/972,098 fails to teach the use of sodium bicarbonate (sodium bicarbonate and baking soda are synonyms). The Randolph reference teaches that baking soda removes odors present in refrigerators (col.1, lines 9-12). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system disclosed in the copending Application No. 09/972,098

to include sodium bicarbonate in order to remove odors present in refrigerators (Randolph, col.1, lines 9-12).

11. Claims 2-4, 8 and 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/972,098 in view of Randolph (U.S.P.N. 4,844,394) and further in view of Aibe et al (U.S.P.N. 5,403,548).

This is a provisional obviousness-type double patenting rejection.

With respect to claims 2-4, both the claims of Application No. 09/972,098 and the ('394) reference fail to disclose a cartridge and an air moving member with a housing such that the cartridge sits on the top portion of the housing of the air moving member. With respect to claims 2-4, Aibe ('548) teaches the following: the filter member (figure 2, 7) includes a cartridge (figure 1, 6) which has a top portion and a bottom portion (figure 2, such parts of 6 are not labeled), also the cartridge has air inlets in its top (figure 2, top portion of 6 is not labeled) and air outlets on its bottom (figure 2, bottom portion of 6 is not labeled), the air moving member (figure 2, the lower part of 2 which includes a fan) has a top portion (serves as a base for the filter member) with an air inlet therein (figure 2, top portion of the lower part of 2 on which 7 lies directly above) , the cartridge (figure 1, 6) sits on the top portion of the air moving member such that the air outlets on the bottom of the cartridge partially in alignment with the air inlet on the air moving member, the air moving member includes a fan (figure 2, 8). Thus, it would have been obvious to one having ordinary skill in the art to modify the system disclosed in the claims of the

compending Application No. 09/972,098 to include a cartridge for easy replacement of filter (Aibe et al, col.11, lines 33-35).

With respect to claim 8, Aibe ('548) discloses the use of activated carbon as part of the filter medium (col.4, lines 5-6).

With respect to claim 17, Aibe et al ('548) teaches the following: the air moving member (figure 2, the lower part of 2 which includes a fan) has a top portion (serves as a base for the filter member) that is exposed to the outside environment either by having outside air run across it or when removing the filter member with an air inlet therein (figure 2, top portion of the lower part of 2 on which 7 lies directly above), the cartridge (figure 1, 6) sits on the top portion of the air moving member such that the air outlets on the bottom of the cartridge partially in alignment with the air inlet on the air moving member, the air moving member includes a fan (figure 2, 8). Furthermore, the filter member is intrinsically held in place by the gravitational forces (suction of the fan) and the surface topology of the interfacing parts of the filter member and the air-moving member. In addition, Aibe et al ('548) teaches that the location of the fan, the cartridge, the inlets, and the outlets can be varied (col.9, lines 32-51 and col.14, lines 21-31).

12. Claims 5-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of compending Application No. 09/972,098 in view of Randolph (U.S.P.N. 4,844,394) and further in view of Bermas (U.S.P.N. 5,772,959).

This is a provisional obviousness-type double patenting rejection.

With respect to claim 5, the claims of Application No. 09/972,098 fail to teach the use of sodium bicarbonate. The Randolph reference teaches the use of sodium bicarbonate but fails to teach if sodium bicarbonate is designed to be pervious to air when used with an air-moving member. However, Bermas teaches the use of sodium bicarbonate (col.1, lines 49-54) and further discloses that Frazier teaches that it is known in the art of air fresheners to use deodorizers in granular form so that a fan can draw air through the filter (sufficiently pervious) to remove odors (col.2, lines 11-17). Thus, one skilled in the art would have been motivated modify the system disclosed in the claims of the copending Application No. 09/972,098 to include a known deodorizer such as sodium bicarbonate in granular form such that it is sufficiently pervious for the system to operate.

With respect to claims 6-7, Bermas teaches the following: filter element (figure 2, 10) includes a container (figure 2, 40) with at least two air pervious sides (figure 4, 40 has two unlabeled sides), which contains sodium bicarbonate (col.1, line 51), the container is a bag (col.4, lines 51-52) made of air pervious material with sodium bicarbonate therein, and the filter medium includes activated carbon (col.4, line 41).

13. Claims 18-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/972,098 in view of Randolph (U.S.P.N. 4,844,394) and further in view of Aibe et al (U.S.P.N. 5,403,548) and Ganz (U.S.P.N. 2,025,657).

This is a provisional obviousness-type double patenting rejection.

With respect to claim 18, the claims of Application No. 09/972,098, the ('394) reference and the ('548) reference fail to teach the concept of having complementary hemispherical interfacing parts between the filter member and the air-moving member. Ganz discloses a hemispherical filter member (figure 1, 10 and 12) for deodorizing air (col.1, lines 5-6). Thus, It would have been obvious to one having ordinary skill in the art to modify the system disclosed in the claims of the copending Application No. 09/972,098 to include a spherical filter member since such a shape has an attractive appearance (Ganz, col.1, lines 16-18).

With respect to claim 19, the filter member (36) of Aibe et al ('548) is lifted upward from the air-moving member (35) for replacement (col.13, lines 35-38).

14. Claims 11 and 14 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 6 of copending Application No. 09/972,098 in view of Randolph (U.S.P.N. 4,844,394).

This is a provisional obviousness-type double patenting rejection.

The concepts of claims 11 and 14 of application number 09/775,999 are included in claim 6 of copending application 09/972,098. For example, claim 6 teaches a first emitting device including an air moving member and a first passive emitting member to be used in the air-moving member. The first passive emitting member includes a first substance. Also, the claim recites one or more additional deodorizing and/or emitting members that include passive emitting members with a medium that can be different from the first medium and the passive deodorizing and/or emitting members can be used interchangeably and thus being detachable from the air moving member with the

first passive deodorizing and/or emitting member in the air moving member. However, claim 6 of copending Application No. 09/972,098 fails to teach the use of sodium bicarbonate (sodium bicarbonate and baking soda are synonyms). The Randolph reference teaches that baking soda removes odors present in refrigerators (col.1, lines 9-12). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system disclosed in the copending Application No. 09/972,098 to include sodium bicarbonate in order to remove odors present in refrigerators (Randolph, col.1, lines 9-12).

15. Claims 12-13 and 15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/972,098 in view of Randolph (U.S.P.N. 4,844,394) and further in view of Aibe et al (U.S.P.N. 5,403,548).

With respect to claim 12, the claims of copending Application fail to teach placing the deodorizer in a refrigerator. Randolph teaches placing a baking soda container in a refrigerator. Thus, it would have been obvious to one having ordinary skill in the art to modify claim 1 of copending Application No. 09/972,098 by placing such a system in a refrigerator in order to remove odors (Randolph, col.1, lines 9-12).

With respect to claims 13 and 15, Aibe ('548) discloses that the device can be used in a refrigerator (col.20, lines 22-23), which intrinsically includes compartments separate from the remainder of the confined space. Thus, in order to deodorize air in a refrigerator, inserting the device in the compartments or in the main section of the refrigerator is an intrinsic step in achieving such a goal. However, Aibe fails to disclose

the use of sodium bicarbonate. Randolph teaches the use of a passive filter member (figure 1, 12), which includes sodium bicarbonate (col.2, lines 24-26) to deodorize air in a refrigerator. As a result, it would have been obvious for a person having ordinary skill in the art of deodorizing air in the refrigerators to utilize the teachings of Randolph to Aibe in order to optimize the rate of deodorization of air inside refrigerators by combining passive and active deodorizers.

16. Claim 20 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4 of copending Application No. 09/972,098 in view of Ganz (U.S.P.N. 2,025,657).

This is a provisional obviousness-type double patenting rejection.

The concepts of claim 20 of application number 09/775,999 are included in claims 1 and 4 of copending application 09/972,098. For example, the claims teach a first emitting device including an air moving member and a first passive deodorizing and/or emitting member to be used in the air-moving member. The first passive deodorizing and/or emitting member include a first substance. Also, the claims recites one or more additional deodorizing and/or emitting members that include passive deodorizing and/or emitting members with a medium that can be different from the first medium and the passive deodorizing and/or emitting members can be used interchangeably with the first passive deodorizing and/or emitting member in the air moving member. However, claims 1 and 4 of copending Application No. 09/972,098 fail to teach a scent substance. Ganz discloses an emitting member (sachet container) including a scent (i.e., fragrance, col.1, lines 47-49) to be emitted into the atmosphere.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system disclosed in the copending Application No. 09/972,098 to include a scent (fragrance) in order to deodorize the air.

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

19. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

20. Claims 1-8 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aibe et al (U.S.P.N. 5,403,548) in view of Bermas (U.S.P.N. 5,772,959) and further in view of Aibe et al (U.S.P.N. 5,288,306).

With respect to claims 1, 11, 14, and 16, Aibe et al teaches the following: an air-deodorizing system (figure 3, 31) and a method (col.20, test example 3), which includes providing an air filter member (figure 3, unlabeled entire filter structure made up of 36 and the filter medium, which is disposed in upper part of 35), a filter element (figure 3, 36) with a filter medium (col.4, lines 5-7), an air moving member (figure 3, 35) that draws air through at least a portion of the filter element (figure 3, 36, the arrows, and 38) such that the filter member is detachable from it (figure 1, 6 and col.13, lines 35-38) such that the air filter member is arranged with the filter element (air flows through both structures, arrows in figure 3, since both structures are arranged next to each other creating an air flow path) in interaction with the air flowing along the air flow path, positioning the filter member inside a confined space (col.12, lines 67-68 and col.13, lines 1-2), and neutralizing odor in the air of the confined space. However, with respect to claims 1, 11, 14, and 16, Aibe et al ('548) fails to disclose the use of sodium bicarbonate and the use of a second filter member used interchangeably with the first filter member. However, with respect to claims 1 and 11, Bermas discloses the use of sodium bicarbonate in deodorizing the inside of refrigerators (col.1, lines 49-54) but fails to teach the use of a second filter member used interchangeably with the first filter member. With respect to claims 1, 11, 14, and 16, Aibe et al ('306) teaches multiple filter members (figure 23, 195 and 196) having filter elements that can be

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interchangeably used (col.8, lines 39-40 and col.11, lines 3-6) relative to the air-moving member (figure 23, 194) by being detachable. Also, Aibe et al ('306) discloses using various distinct filter mediums (figure 1, 6 and 7). Thus, it would have been obvious to one having ordinary skill in the art to modify the method and apparatus of Aibe et al ('548) to include multiple filter members since utilizing a plurality of filter members having varying adsorbent affinities for malodorous components, even a gas containing many kinds of malodorous or toxic components can be efficiently eliminated (Aibe et al '306, col.8, lines 41-45).

Furthermore, with respect to claims 1, 11, 14, and 16, regarding the use of both passive and active deodorizers together, Bermas, which is in the art of deodorizing the air in refrigerators (col.1, lines 11-15) using passive deodorizers (figure 1, 10), teaches that combining activated carbon and sodium bicarbonate is known in the art of deodorizing refrigerators (col.1, lines 49-54). Thus, it would have been obvious for a person having ordinary skill in the art of deodorizing air in the refrigerators to utilize the teachings of Bermas to Aibe et al in order to maximize the rate of deodorization of air inside refrigerators by combining passive and active deodorizers.

With respect to claims 2-4, Aibe ('548) teaches the following: the filter member (figure 2, 7) includes a cartridge (figure 1, 6) which has a top portion and a bottom portion (figure 2, such parts of 6 are not labeled), also the cartridge has air inlets in its top (figure 2, top portion of 6 is not labeled) and air outlets on its bottom (figure 2, bottom portion of 6 is not labeled), the air moving member (figure 2, the lower part of 2 which includes a fan) has a top portion (serves as a base for the filter member) with an

air inlet therein (figure 2, top portion of the lower part of 2 on which 7 lies directly above), the cartridge (figure 1, 6) sits on the top portion of the air moving member such that the air outlets on the bottom of the cartridge partially in alignment with the air inlet on the air moving member, the air moving member includes a fan (figure 2, 8).

With respect to claim 5, Bermas teaches the use of sodium bicarbonate (col.1, lines 49-54) and further discloses that Frazier teaches that it is known in the art of air fresheners to use deodorizers in granular form so that a fan can draw air through the filter (sufficiently pervious) to remove odors (col.2, lines 11-17). Thus, one skilled in the art would have been motivated to modify Aibe et al. apparatus to include a known deodorizer such as sodium bicarbonate in granular form such that it is sufficiently pervious for the system to operate.

With respect to claims 6-7, Bermas teaches the following: filter element (figure 2, 10) includes a container (figure 2, 40) with at least two air pervious sides (figure 4, 40 has two unlabeled sides), which contains sodium bicarbonate (col.1, line 51), the container is a bag (col.4, lines 51-52) made of air pervious material with sodium bicarbonate therein, and the filter medium includes activated carbon (col.4, line 41).

With respect to claim 8, Aibe ('548) discloses the use of activated carbon as part of the filter medium (col.4, lines 5-6).

With respect to claim 12, Aibe et al ('548) teaches that the confined space is inside a refrigerator (col.20, lines 22-23).

With respect to claims 13 and 15, Aibe ('548) discloses that the device can be used in a refrigerator (col.20, lines 22-23), which intrinsically includes compartments

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separate from the remainder of the confined space. Thus, in order to deodorize air in a refrigerator, inserting the device in the compartments or in the main section of the refrigerator is an intrinsic step in achieving such a goal. However, Aibe fails to disclose the use of sodium bicarbonate. Bermas teaches the use of a passive filter member (figure 1, 10), which includes sodium bicarbonate (col.1, line 51) to deodorize air in a refrigerator. As a result, it would have been obvious for a person having ordinary skill in the art of deodorizing air in the refrigerators to utilize the teachings of Bermas to Aibe in order to optimize the rate of deodorization of air inside refrigerators by combining passive and active deodorizers.

With respect to claim 17, Aibe et al ('548) teaches the following: the air moving member (figure 2, the lower part of 2 which includes a fan) has a top portion (serves as a base for the filter member) that is exposed to the outside environment either by having outside air run across it or when removing the filter member with an air inlet therein (figure 2, top portion of the lower part of 2 on which 7 lies directly above), the cartridge (figure 1, 6) sits on the top portion of the air moving member such that the air outlets on the bottom of the cartridge partially in alignment with the air inlet on the air moving member, the air moving member includes a fan (figure 2, 8). Furthermore, the filter member is intrinsically held in place by the gravitational forces (suction of the fan) and the surface topology of the interfacing parts of the filter member and the air-moving member. In addition, Aibe et al ('548) teaches that the location of the fan, the cartridge, the inlets, and the outlets can be varied (col.9, lines 32-51 and col.14, lines 21-31).

21. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aibe et al (U.S.P.N. 5,403,548) in view of Bermas (U.S.P.N. 5,772,959) and further in view of Aibe et al (U.S.P.N. 5,288,306) and Ganz (U.S.P.N. 2,025,657).

With respect to claim 18, both Aibe et al ('548), Bermas, and Aibe et al ('306) fail to teach the concept of having complementary hemispherical interfacing parts between the filter member and the air-moving member. Ganz discloses a hemispherical filter member (figure 1, 10 and 12) for deodorizing air (col.1, lines 5-6). Thus, It would have been obvious to one having ordinary skill in the art to modify the air-moving member of Aibe et al ('548) to include a spherical filter member since such a shape has an attractive appearance (Ganz, col.1, lines 16-18).

With respect to claim 19, the filter member (36) of Aibe et al ('548) is lifted upward from the air-moving member (35) for replacement (col.13, lines 35-38).

With respect to claim 20, Ganz discloses an emitting member (sachet container) including a scent (i.e., fragrance, col.1, lines 47-49) to be emitted into the atmosphere.

Response to Arguments

22. Applicant's arguments filed 06/01/2004 have been fully considered but they are not persuasive.

On page 6 of the response, applicant argues that, "As stated, in Applicant's previous response, the Aibe, et al. '306 reference does disclose multiple filter members, but they are all located within the housing of the gas treating apparatus". The examiner disagrees. The ('306) is combined only to show that the use of multiple filter members (figure 23, 195 and 196) having filter elements that can be interchangeably used relative

to the air-moving member by being detachable along with using various distinct filter mediums (figure 1, 6 and 7) is known. The ('306) reference is not used for the feature of whether all the filter members are located within the housing. Further such a limitation is not recited in the instant claims.

On pages 6-7 of the response, applicant argues that, "The activated carbon honeycomb elements are not described as being used in a confined space (for example, a refrigerator) outside of the housing of the gas treating apparatus". The examiner disagrees. Again, the ('306) reference is used to show that the use of multiple filter members (figure 23, 195 and 196) having filter elements that can be interchangeably used relative to the air-moving member by being detachable along with using various distinct filter mediums (figure 1, 6 and 7) is known. The ('306) reference is not used for the feature of having activated carbon filter members used in a confined space outside of the housing of the gas treating apparatus. The ('548) reference teaches deodorizing the inside of refrigerators by using an activated carbon filter member.

On page 7 of the response, applicant argues that, "None of the references disclose a method for deodorizing air using a first filter member comprising an air moving member and a filter element associated with said air moving member and a second filter member, and positioning a second filter member inside a confined space independent of the first filter member". The examiner disagrees. The ('959) discloses (col.1, lines 49-55) that combinations of various odor controllers including activated carbon and sodium bicarbonate are known to be used together to treat air within

refrigerators. As a result, it would have been obvious for a person having ordinary skill in the art of deodorizing air in the refrigerators to utilize the teachings of Bermas to Aibe et al ('548) in order to maximize the rate of deodorization of air inside refrigerators by combining a passive deodorizer (second filter member) and an active deodorizer (a first filter member inside an air moving part).

On page 7 of the response, applicant argues that, "Claim 20 has been amended to clarify that the substance being emitted is not merely deodorized air". The ('657) reference discloses emitting a scent (i.e., fragrance, col.1, lines 47-49) into the atmosphere.

On page 7 of the response, applicant argues that, "The Ganz reference is not used in combination with an air-moving member". The examiner disagrees. The Ganz reference is combined with the ('548) and the ('959) references for the "hemispherical" shape feature.

On page 7 of the response, applicant argues that, "it would not have been obvious to one of ordinary skill in the art to modify the air-moving member of Aibe, et al. to include a spherical filter member because there would be no motivation to do so". The examiner disagrees. One skilled in the art would modify the design of the ('548) device to include the spherical filter member of the ('657) freshener because of its attractive appearance.

On page 7 of the response, applicant argues that, "It would not make sense to use a spherical activated carbon honeycomb element because this compartment is not configured to accept a spherically-shaped element". The examiner disagrees since it is

credible to believe that changes in the design of the ('548) reference fresheners to accommodate the freshener of the ('657) is a matter of routine experimentation.

On page 7 of the response, applicant argues that, "There is no teaching or suggestion in the Aibe, et al. reference to provide a filter member is used in conjunction with an air moving member that is held in place thereon by gravitational forces and the surface topology of the interfacing parts of the filter member and the air moving member". The examiner disagrees since modifying the ('548) apparatus to include the ('657) freshener would result in a hemispherical freshener held in place by gravitational forces by having complimentary surface topology between the ('548) apparatus and the ('657) air freshener.

On pages 7-8 of the response, applicant argues that, "there is no need to be concerned with the attractive appearance of the honeycomb element in the Aibe because it is hidden from view when in use. The activated carbon honeycomb element in the Aibe, et al. reference is contained in a closed compartment". The examiner disagrees. The filter in the ('548) reference in figure 6 is not hidden from view and one skilled in the art would modify the design of the ('548) apparatus to include the ('657) freshener because of its attractive appearance.

On page 8 of the response, applicant argues that, "the claimed air moving member has an open top portion that is exposed to the outside environment that serves as base for said filter member". In the ('548) reference, the air moving member (figure 2, the lower part of 2 which includes a fan) has a top portion (serves as a base for the filter

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member) that is exposed to the outside environment either by having outside air run across it or when removing the filter member (7).

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONZER R CHORBAJI whose telephone number is (571) 272-1271. The examiner can normally be reached on M-F 8:30-5:00.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ROBERT J WARDEN can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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